

Seq Listing CL1665.ST25.txt  
SEQUENCE LISTING

<110> E.I. du Pont de Nemours and Co.  
Prober, James M.  
Dam, Rudy  
Hendrickson, Edwin R.  
Perry, Michael P.  
Jiang, Xueping'  
Cui, Xiumin  
Steenhoek, Larry Eugene

<120> Microparticle-Based Methods and Systems and Applications Thereof

<130> CL1665 US NA

<160> 17

<170> PatentIn version 3.2

<210> 1

<211> 516

<212> DNA

<213> Artificial sequence

<220>

<223> Synthetic FMD target

<400> 1

gcggccgcgc ccccgccac ttttgccat tcacccgagc gaagctagac acaacaaaa	60
gattgtggca ccggtgaaac agcttttgag ctttgacctg ctcaagttgg caggggacgt	120
cgagtccaac cctgggcctt tcttcttctc tgacgttagg tcaaattttt ccaagttggt	180
tgaaaccatc aaccagatgc aggaggacat gtcaacaaaa cacggaccgc actttaaccg	240
gttggtgtct gcatttgagg aactggccac cggagtgaag gctatcagga ccggtctcga	300
tgaggccaaa ccctggtaca agctcatcaa gctcttgagc cgctgtcat gtatggccgc	360
tgtagcagca cgggtcaaagg acccagtcct tgtggccatc atgctggctg acaccggcct	420
tgagattctg gacagtacct ttgtcgtgaa gaagatctcc gactcgctct ccagtctctt	480
tcacgtaccg gccccgtct tcagtttcgg gaattc	516

<210> 2

<211> 48

<212> DNA

<213> Artificial Sequence

<220>

<223> oligonucleotide probe JBP

<400> 2

tcaaccagat gcaggaggac atgtcaacaa aacacggacc cgacttaa	48
--	----

<210> 3

<211> 48

<212> DNA

<213> Artificial Sequence

<220>

<223> Modified oligonucleotide probe JBP S2SP3B

Seq Listing CL1665.ST25.txt

<220>  
 <221> modified\_base  
 <222> (1)..(1)  
 <223> C6-S-S(Sp)2, where C6-S-S is 1-O-dimethoxytritylhexyl-disulfide,  
 1-[(2-cyanoethyl)-(N,N-diisopropyl)]-phosphoramidite and Sp is the  
 spacer 18-O-dimethoxytritylhexaethyleneglycol,  
 1-[(2-cyanoethyl)-(N,N-diisopropyl)]-phosphoramidite

<220>  
 <221> modified\_base  
 <222> (48)..(48)  
 <223> Biotinylated

<400> 3  
 tcaaccagat gcaggaggac atgtcaacaa aacacggacc cgacttaa 48

<210> 4  
 <211> 48  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> oligonucleotide probe N-JBC

<220>  
 <221> modified\_base  
 <222> (1)..(1)  
 <223> amine group

<220>  
 <221> modified\_base  
 <222> (48)..(48)  
 <223> biotinylated

<400> 4  
 ttaagtcggg tccgtgtttt gttgacatgt cctcctgcat ctggttga 48

<210> 5  
 <211> 48  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Fluorescein-labeled oligonucleotide target JBC-F

<220>  
 <221> modified\_base  
 <222> (48)..(48)  
 <223> Fluorescein labeled

<400> 5  
 ttaagtcggg tccgtgtttt gttgacatgt cctcctgcat ctggttga 48

<210> 6  
 <211> 49  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Fluorescein-labeled oligonucleotide target control Lac2-F

Seq Listing CL1665.ST25.txt

```

<220>
<221> modified_base
<222> (49)..(49)
<223> Fluorescein labeled

<400> 6
tgaatttgat tgcgagtgag atatttatgc cagccagcca gacgcagac 49

<210> 7
<211> 48
<212> DNA
<213> Artificial Sequence

<220>
<223> Fluorescein-labeled oligonucleotide target JBP-F

<220>
<221> modified_base
<222> (48)..(48)
<223> Fluorescein labeled

<400> 7
tcaaccagat gcaggaggac atgtcaacaa aacacggacc cgacttaa 48

<210> 8
<211> 206
<212> DNA
<213> Artificial Sequence

<220>
<223> FMD PCR fragment JB

<400> 8
gagtccaacc ctgggccctt cttcttctct gacgttaggt caaatTTTTc caagttggtt 60
gaaaccatca accagatgca ggaggacatg tcaacaaaac acggacccga ctttaaccgg 120
ttggtgtctg catttgagga actggccacc ggagtgaagg ctatcaggac cggctctgat 180
gaggccaaac cctggtacaa gctcat 206

<210> 9
<211> 511
<212> DNA
<213> Artificial Sequence

<220>
<223> Lac2-511 PCR nonspecific target fragment

<400> 9
atactgcaga acgcgtcagt gggctgatca ttaactatcc gctggatgac caggatgcca 60
ttgctgtgga agctgcctgc actaatgttc cggcgttatt tcttgatgtc tctgaccaga 120
caccatcaa cagtattatt ttctcccatg aagacggtac gcgactgggc gtggagcatc 180
tggtcgcatt gggtcaccag caaatcgcg cgttagcggg cccattaagt tctgtctcgg 240
cgcgctctgc tctggctggc tggcataaat atctcactcg caatcaaatt cagccgatag 300
cggaacggga aggcgactgg agtgccatgt ccggttttca acaaaccatg caaatgctga 360
atgagggcat cgttcccact gcgatgctgg ttgccaacga tcagatggcg ctgggcgcaa 420

```

## Seq Listing CL1665.ST25.txt

tgcgcgccat taccgagtcc gggctgcgcg ttggcgcgga tatctcgga gtgggatacg 480  
acgataccga agacagctca tggaattctg t 511

<210> 10  
<211> 27  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Primer

<400> 10  
gagtccaacc ctgggccctt cttcttc 27

<210> 11  
<211> 23  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Primer

<400> 11  
atgagcttgt accagggttt ggc 23

<210> 12  
<211> 30  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Primer

<400> 12  
atactgcaga acgcgtcagt gggctgatca 30

<210> 13  
<211> 35  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Primer

<400> 13  
acagaattcc atgagctgtc ttcggtatcg tcgta 35

<210> 14  
<211> 16  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Peptide nucleic acid probe JBP2C

<220>  
<221> misc\_feature  
<222> (1)..(16)  
<223> Nucleotide bases are joined by peptide bonds instead of  
phosphodiester bonds

## Seq Listing CL1665.ST25.txt

<400> 14  
tccgtgtttt gttgac 16

<210> 15  
<211> 16  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Modified Peptide Nucleic Acid Probe JBP2BC

<220>  
<221> modified\_base  
<222> (1)..(1)  
<223> Biotinylated

<220>  
<221> misc\_feature  
<222> (1)..(16)  
<223> Nucleotide bases are joined by peptide bonds instead of phosphodiester bonds

<220>  
<221> modified\_base  
<222> (16)..(16)  
<223> Cysteine residue

<400> 15  
tccgtgtttt gttgac 16

<210> 16  
<211> 206  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Compliment of PCR product JB

<400> 16  
atgagcttgt accagggttt ggcctcatcg agaccgggtcc tgatagcctt cactccggtg 60  
gccagttcct caaatgcaga caccaaccgg ttaaagtcgg gtccgtgttt tgttgacatg 120  
tcctcctgca tctggttgat ggtttcaacc aacttgga aaatttgacct aacgtcagag 180  
aagaagaagg gcccagggtt ggactc 206

<210> 17  
<211> 48  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Modified fluorescein-labeled oligonucleotide probe JBP S2SP3F

<220>  
<221> modified\_base  
<222> (1)..(1)  
<223> C6-S-S-(Sp)<sub>2</sub>, where C6-S-S is 1-O-dimethoxytritylhexyl-disulfide, 1-[(2-cyanoethyl)-(N,N-diisopropyl)]-phosphoramidite, and Sp is the spacer 18-O-dimethoxytritylhexaethyleneglycol, 1-[(2-cyanoethyl)-(N,N-diisopropyl)]-phosphoramidite

Seq Listing CL1665.ST25.txt

<220>

<221> modified\_base

<222> (48)..(48)

<223> Fluorescein labeled

<400> 17

tcaaccagat gcaggaggac atgtcaacaa aacacggacc cgacttaa

48